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The Metamorphosis of Narcissus: Communal Activation Promotes Relationship Commitment Among Narcissists

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Three studies tested the hypotheses that the activation of communal mental representations promotes relationship commitment (communal activation hypothesis) and that this effect is stronger among narcissists than among nonnarcissists (Communal Activation \times Narcissism hypothesis). Across experimental, longitudinal, and interaction-based research methods, and in participant samples ranging from college students to married couples, results supported the communal activation hypothesis in two of three studies and the Communal Activation \times Narcissism hypothesis in all three studies. Moreover, a meta-analytic summary of the results across the three studies revealed that the association of communal activation with commitment was significant overall and that it was stronger among narcissists than among nonnarcissists. Narcissists tended to be less committed than nonnarcissists at low levels of communal activation, but this effect diminished and sometimes even reversed at high levels. This work is the first to identify a mechanism by which narcissists can become more committed relationship partners.

Keywords: *narcissism; communal activation; commitment; relationships; marriage*

Salvador Dalí's surrealist masterpiece *The Metamorphosis of Narcissus* (1937) depicts the rapture, demise, and rebirth of Narcissus. According to Greek mythology, the beautiful Narcissus never knew love until he saw his own reflection in a pool. He fell madly

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in love with it, yearning for the incorporeal reflection until the sorrow from his unrequited passion killed him. He was reborn as the flower that bears his name. In the present report, we explore a different type of metamorphosis—one with a decidedly happier ending. Rather than investigating the process by which Narcissus metamorphoses into a flower, we investigate a novel process by which narcissists metamorphose into committed relationship partners.

Identifying a commitment-promoting process among narcissists is no small feat. Abundant empirical evidence suggests that narcissism is typically a curse for intimate relationships. For example, relative to non-narcissists, narcissists tend to be (a) less committed to their romantic partners (e.g., Campbell & Foster, 2002; Foster, 2008), (b) more interested in alternative partners (Campbell & Foster, 2002), (c) more likely to be unfaithful (Buss & Shackelford, 1997), and (d) more likely to adopt a game-playing approach to relationships (Campbell, Foster, & Finkel, 2002). We suggest that activating communal mental representations among narcissists is an especially promising avenue for promoting their relationship commitment. Before presenting the rationale underlying this prediction, we review the empirical literature examining narcissism in interpersonal contexts.

Narcissism

Narcissism is a personality trait characterized by grandiose self-views, a relative lack of intimacy with others, and the use of self-enhancing self-regulation strategies (for a review, see Morf & Rhodewalt, 2001). Relative to nonnarcissists, narcissists report low levels of traits associated with communion: They tend to care less about others (Campbell, Rudich, & Sedikides, 2002), to be lower in agreeableness (Miller & Campbell, 2008; Paulhus & Williams, 2002), and to have a weaker need for intimacy (Carroll, 1987).¹

Consistent with their generally noncommunal approach to relationships, narcissists take advantage of other people to help them achieve their self-enhancing self-regulatory goals. Their interpersonal strategies include bragging or drawing attention to the self (Buss & Chiodo, 1991), performing well when there is an opportunity for public glory but underperforming when there is not (Wallace & Baumeister, 2002), and attributing failure to others while taking credit for success (Campbell, Reeder, Sedikides & Elliot, 2000).

Narcissists, who frequently become angry and aggressive when these self-regulatory strategies are thwarted (Bushman & Baumeister, 1998), even employ these strategies in romantic relationships, where they (a) select popular and high-status (i.e., “trophy”) partners

and shun caring partners (Campbell, 1999), and (b) endorse an agentic rather than a communal orientation toward sexuality, which in turn predicts lower commitment (Foster, Shrira, & Campbell, 2006). In short, narcissists tend to be more deficient than nonnarcissists in their communal orientation toward others. But what would happen if communal mental representations were activated in narcissists, either by their partners or by situational cues? Would they become more committed relationship partners?

Communal Activation

Before we address these questions, we ask a more basic one: What does *communal* mean? The psychological use of this term was central to the theorizing of Bakan (1966), who argued that human motives could be divided into two central domains: communion and agency. The communal domain includes qualities such as helpfulness, nurturance, warmth, and caring, whereas the agentic domain includes qualities such as ambition, assertiveness, confidence, and independence. This general dichotomy was also discussed by Freud (1914/1957), who discussed anaclitic (communal) versus narcissistic (agentic) attachment, as well as in ancient notions of love (communal) versus strife (agentic) and yin (communal) versus yang (agentic). The domains of communion and agency also map onto two broad dimensions of personality, which in their most general form have been termed *alpha* (communal) versus *beta* (agentic; Digman, 1997; Saragovi, Aube, Paquet, & Koestner, 2002).

We define *communal activation* as the process whereby environmental or interpersonal circumstances activate communal thoughts or motives. Presumably, such communal activation could emerge in various ways. Therapeutic interventions designed to foster empathy should activate communal motives (e.g., Masterson, 1988). The induction of a unit relation between two individuals (e.g., by telling them that they have the same birthday or same fingerprint type) may yield parallel consequences; indeed, such a manipulation causes narcissists to become less aggressive than usual following ego threat (Konrath, Bushman, & Campbell, 2006).

In the present research, we examine three distinct but interrelated operational definitions of communal activation: (a) a cognitive priming procedure designed to increase the accessibility of concepts such as nurturance and helpfulness, (b) perceptions that a partner elicits characteristics such as nurturance and warmth from the self, and (c) the experience of feeling loved and cared for during discrete social interactions with a romantic partner. How and why might the activation of communal

mental representations via these diverse operationalizations influence narcissists' feelings of commitment?

Narcissism, Communal Activation, and Commitment

Commitment refers to psychological attachment to, intent to persist in, and long-term orientation toward a romantic relationship (Arriaga & Agnew, 2001). Commitment predicts relationship stability (Drigotas & Rusbult, 1992; Rusbult, 1983) and prorelationship maintenance mechanisms such as accommodation (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), forgiveness of betrayal (Finkel, Rusbult, Kumashiro, & Hannon, 2002), derogation of tempting alternatives (Johnson & Rusbult, 1989), and positive illusion (Rusbult, Van Lange, Wildschut, Yovetich, & Verette, 2000). Communal representations are core elements of commitment, including motivation to provide assistance and support as well as concern for a partner's well-being. Indeed, highly committed individuals exhibit interdependent mental representations, including greater spontaneous use of plural pronouns (*we, us, our*) and stronger tendencies to perceive the partner as especially central to their life (Agnew, Van Lange, Rusbult, & Langston, 1998). As such, the activation of communal mental representations should typically yield strengthened commitment.

We hypothesize that narcissists will typically exhibit lower levels of commitment than will nonnarcissists when communal activation is low but that this difference will diminish and perhaps even disappear when communal activation is high. Our rationale is that narcissists should be more influenced by communal activation because they have a lower communal baseline than nonnarcissists do. This effect emerges across diverse measures of communion, including self-reported personality characteristics (Paulhus & Williams, 2002), Thematic Apperception Test scores (Carroll, 1987), and implicit association test scores (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007). By analogy, consider how imbibing a six-pack of beer influences light versus heavy drinkers. Although heavy drinkers, who are likely to have developed a tolerance for alcohol, will feel the intoxicating effects of the six-pack, they typically will feel these effects less strongly than will light drinkers (controlling for body mass and other individual differences). Given that light drinkers have not developed a tolerance for alcohol, the atypical state of having alcohol in their system will produce a stronger intoxicating effect. Similarly, the experience of communal activation is likely to exert a stronger effect on individuals for whom it is an atypical state (narcissists) than on individuals for whom it is a typical state (nonnarcissists). Therefore, we suggest that the commitment-promoting

effects of communal activation will be stronger for narcissists than for nonnarcissists.

The Present Research

Based on the preceding theoretical analysis, we advance a Communal Activation \times Narcissism hypothesis. Both ways of unpacking this interaction effect are theoretically interesting. First, we predict that the association of communal activation with commitment will be stronger among narcissists than among nonnarcissists. And second, we predict that narcissism will be negatively associated with commitment when communal activation is weak but that this association will diminish and perhaps even disappear as communal activation becomes stronger. Also, given that communal activation is likely to strengthen commitment even among nonnarcissists (although less strongly than among narcissists), we also advance a communal activation hypothesis, which predicts that communal activation will exhibit a positive main association with commitment.

We conducted three studies to test these hypotheses, operationally defining communal activation in different ways across studies. In Study 1, we employed a subliminal prime to activate cognitive representations of helpfulness and nurturance among undergraduates. In Study 2, married participants reported the degree to which their partner elicits five communal qualities from them (e.g., nurturing, generous). In Study 3, romantically involved participants reported the degree to which their partner made them feel loved and cared for during laboratory-based interactions. Finally, we report a meta-analytic summary of the overall pattern of results across the three studies.

STUDY 1

In Study 1, we randomly assigned participants who were involved in dating relationships to experience a communal activation prime or a control prime. Subsequently, participants reported whether each of five commitment-relevant traits was characteristic of them. We predicted that the communal activation main effect and the Communal Activation \times Narcissism interaction effect would be significant, such that the positive effect of the communal activation prime on commitment word endorsement would be stronger among narcissists than among nonnarcissists. Another way of framing this hypothesis is that in the control condition, narcissists should endorse fewer commitment words as self-relevant than should nonnarcissists but that this discrepancy should diminish and perhaps even disappear in the communal activation condition.

Method

Participants. Seventy-six undergraduates (39 females, 37 males) participated in the study in partial fulfillment of the requirements for an introductory psychology course. Participants were 19.67 years old, on average, and had been involved with their romantic partner for an average of 16.65 months. They were predominantly Caucasian (84%).

Procedure and materials. Participants first completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), a 40-item, forced-choice format questionnaire based on the *Diagnostic and Statistical Manual of Mental Disorders—Third Edition* (DSM-III; American Psychiatric Association, 1980) criteria for narcissistic personality disorder, but designed for use with normal populations (e.g., “I am more capable than other people” vs. “There is a lot that I can learn from other people”). This reliable and valid instrument is the most widely used self-report measure of nonclinical narcissism and yields narcissism scores that are distributed dimensionally rather than categorically; there is “no apparent shift from ‘normal’ to ‘narcissist’ . . . across the NPI continuum” (Foster & Campbell, 2007, p. 1321). Higher scores on the NPI indicate greater narcissism ($M = 17.12$, $SD = 6.69$, $\alpha = .83$).

Priming task. After completing the NPI, participants were seated at computers and reviewed instructions for a parafoveal priming task (Stapel, Koomen, & Ruys, 2002), which we used to manipulate communal activation. Participants reviewed the instructions while the experimenter read them aloud. The experimenter explained that a block of Xs would appear very briefly on the computer screen in different locations and at varying intervals. She asked them to press the left-hand key marked *L* if the block of Xs appeared on the left side of the screen and to press the right-hand key marked *R* if it appeared on the right side of the screen. She also explained that because the blocks would appear briefly and at unpredictable times, it was important for participants to keep their index fingers on the *L* and *R* keys throughout the task so that they could react as quickly as possible.

Participants first completed 10 practice trials to ensure that they understood the task. Then they completed 35 randomly ordered target trials. During each trial, an image was presented very briefly (35 ms) at various positions on the screen, immediately followed by an 80-ms mask in the same position on the screen. The mask was the block of Xs to which participants were asked to attend during the vigilance task—a 2×2 in. square consisting of six rows of 10 capital Xs. The time

interval between experimental trials was 1 s, 1.5 s, 2.5 s, 4 s, or 5 s. Chinese character images were presented during 20 trials, and prime-relevant images were presented during 15 trials.

In the *communal activation condition*, the 15 prime-relevant trials presented one of three images—each repeated for five trials—picturing people engaging in communal behaviors. These three images depicted a teacher helping a student with her homework, a young woman holding a baby, and an older man assisting an elderly woman in a wheelchair. In the *control prime condition*, the parallel images were neutral: a car, a tree, and a soccer player. All images were in color and 2×2 in., and they were presented on a white screen.

Measuring commitment. Immediately after the priming task, participants moved to another computer to complete a different task, which allowed us to assess feelings of commitment. Instructions for a “me/not me” self-descriptive task (Markus, 1977) were displayed on the monitor as the experimenter reviewed them verbally. The experimenter explained that a personality descriptor would appear on the screen and that the participant’s task was to press a key labeled *me* if the descriptor characterized him or her and to press a key labeled *not me* if it did not. Each word appeared in the center of the screen until the participant responded; a row of 5 capital Xs then appeared immediately for 1 s, followed by the next word. The self-description task required approximately 5 min to complete.

Participants first responded to five practice traits to ensure that they understood the task. Then the computer presented 25 descriptors to participants in random order. Five of them were characteristic of *relationship commitment*: committed, devoted, faithful, loving, and loyal. We selected these words because they are face valid, easily comprehensible, and of an appropriate length for the paradigm. The relationship commitment measure was operationally defined as the number of times a participant responded “me” to the 5 commitment descriptors. These trait words were camouflaged by 20 commitment-irrelevant words (e.g., curious, inquisitive, lucky, relaxed).

Suspicion check. Finally, participants responded to three open-ended questions designed to check for suspicion or awareness of the prime (e.g., “How do you think the tasks were connected?”). No participants discerned the true connection between the tasks. Although many reported that they could see “images” or “pictures” presented during the priming task, they were unable to describe the content of the images. Based on these responses, we concluded that participants did not identify the link between the vigilance task and the “me/not

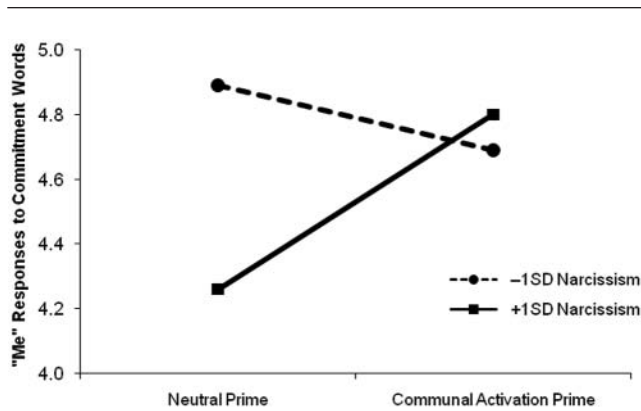


Figure 1 Study 1: Predicting commitment word endorsement from prime condition and narcissism.

NOTE: Low and high values for narcissism are conditioned at 1 SD below and above the mean.

me” self-description task and that the priming stimuli were presented outside of participants’ awareness.

Results

Primary hypothesis tests. To test our hypotheses, we conducted a multiple regression analysis predicting commitment word endorsement from communal activation (control prime = $-.5$; communal activation prime = $+.5$), narcissism, and the Communal Activation \times Narcissism interaction (see Figure 1); narcissism was mean centered. We procured standardized regression coefficients with the REG procedure in SAS. Inconsistent with the communal activation hypothesis, the tendency to endorse more commitment words as self-relevant in the communal activation prime condition ($M = 4.76$, $SD = 0.64$) than in the control condition ($M = 4.64$, $SD = 0.87$) did not reach statistical significance, $\beta = .11$, $t(72) = 0.96$, $p = .343$, perhaps due in part to a ceiling effect (the ceiling was at 5.00). However—and consistent with the Communal Activation \times Narcissism hypothesis—the Communal Activation Prime \times Narcissism interaction was significant, $\beta = .24$, $t(72) = 2.11$, $p = .038$. Tests of simple effects (Aiken & West, 1991) revealed that the effect of the communal activation prime on commitment word endorsement was significant and positive among narcissists (+1 SD), $\beta = .35$, $t(72) = 2.17$, $p = .033$, but not among nonnarcissists (–1 SD), $\beta = -.13$, $t(72) = -0.82$, $p = .413$. That is, narcissists endorsed significantly more commitment words as self-relevant in the communal activation condition than in the control condition, whereas nonnarcissists’ endorsement tendencies did not differ significantly across conditions. The main effect of narcissism was nonsignificant, $\beta = -.17$, $t(72) = -1.47$, $p = .146$.

We also conducted simple effects tests to establish whether the association of narcissism with commitment word endorsement was significant in the control condition and in the communal activation condition. As predicted, narcissism was negatively associated with commitment word endorsement in the control condition, $\beta = -.35$, $t(37) = -2.26$, $p = .030$, but not in the communal activation condition, $\beta = .09$, $t(35) = 0.53$, $p = .601$. That is, in the absence of communal activation, narcissists were less commitment oriented than were nonnarcissists; this difference was not significant in the communal activation condition.

Auxiliary analyses of neutral words. As discussed above, the five commitment-relevant words were embedded within a sequence of 25 words to which participants made “me/not me” responses. To establish that the Communal Activation \times Narcissism interaction effect was specific to commitment-related words, we performed a series of auxiliary regression analyses predicting, in turn, each neutral word from prime condition, narcissism, and their interaction. Given that this data analytic approach required 20 independent and exploratory hypothesis tests, we used a criterion α level of .01 rather than .05 to establish statistical significance. None of the interaction effects was statistically significant.²

Participant sex. To explore whether our key effects differed for men and women, we regressed commitment word endorsement onto communal activation, narcissism, participant sex, and all interaction effects. No interaction effects involving participant sex were significant, $|\beta s| < .13$, $|ts(68)| < 1.11$, $ps > .276$.

Discussion

Study 1 revealed mixed support for our hypotheses. The Communal Activation \times Narcissism hypothesis was supported, but the communal activation hypothesis was not. Narcissists in the communal activation condition endorsed more commitment words as self-relevant than did narcissists in the control condition, whereas the prime did not significantly alter the commitment orientation of nonnarcissists. In addition, in the control condition, narcissists endorsed significantly fewer commitment words as self-relevant than did nonnarcissists, but this difference was not significant in the communal prime condition. The experimental procedures employed in this study suggest that communal activation *causes* narcissists to become more commitment oriented. Moreover, these findings do not appear to be attributable to demand characteristics or to response bias, in that communal representations were activated outside of participants’ conscious awareness.

However, Study 1 was limited in several respects. First, there was a ceiling effect for commitment level among nonnarcissists, who endorsed nearly all of the commitment-relevant words irrespective of communal activation condition; this ceiling effect may partially explain why the communal activation main effect was nonsignificant. Second, although the priming procedure has the considerable advantage of allowing for causal conclusions regarding the impact of communal activation on commitment among narcissists, it is a somewhat artificial means of activating communal representations. In addition, we cannot rule out the possibility that the observed effects among narcissists were driven by agentic deactivation (i.e., lowering narcissists' agentic thoughts, feelings, or behaviors) rather than by communal activation. Our hypotheses focus on communal activation because agentic orientation, especially as it pertains to extraversion or sociability, is not typically destructive to relationships (e.g., Foster, Shrira, & Campbell, 2003; Oltmanns, Friedman, Fiedler, & Turkheimer, 2004; Paulhus, 1998; see also Gonzaga, Keltner, Londahl, & Smith, 2001), whereas the absence of a communal orientation typically is destructive to relationships (e.g., Foster et al., 2003; Paulhus, 1998). Nonetheless, it would be useful to establish empirically that our key effects are robust beyond any effects of agentic deactivation.

We conducted Studies 2 and 3 in part to address these limitations. In Studies 2 and 3, we examine the associations among communal activation, narcissism, and relationship commitment (a) in samples for which we are unlikely to encounter ceiling effects on the commitment measure, (b) using broad and diverse operational definitions of the communal activation construct, (c) examining naturally occurring (rather than experimenter-imposed) variations in participants' subjective experiences of communal activation, and (d) using procedures that allow us to control for any effects of agentic (de)activation. These studies also allow us to test our hypotheses employing longitudinal (Study 2) and interaction-based (Study 3) procedures.

STUDY 2

Study 1 provided experimental evidence relevant to our Communal Activation \times Narcissism hypothesis in a collegiate sample, establishing a causal link between communal activation and commitment among narcissists. In Study 2, we tested our hypotheses in a longitudinal study of married couples, examining change over time in marital commitment. To assess the activation of communal representations, we measured participants' perceptions that the partner elicits communal

characteristics from them. We assessed commitment at the beginning of the study and again 4 months later. The resultant analyses provide a rigorous test of our hypotheses in that commitment is a relatively stable feature of marital relationships, yet our analyses predict Time 2 commitment after controlling for Time 1 commitment.

We assessed two additional variables to help rule out alternative explanations of our findings. First, to rule out the possibility that simply interacting with a communal partner (rather than a partner who elicits communal traits from the self) is sufficient to promote enhanced commitment, we assessed participants' reports of the degree to which the partner possesses communal traits. Second, to rule out the possibility that agentic deactivation drives the effects we attribute to communal activation, we assessed agentic activation.

We predicted that communal activation would predict increases over time in marital commitment (communal activation hypothesis) and that this effect would be stronger among narcissists than among nonnarcissists (Communal Activation \times Narcissism hypothesis). In particular, we predicted that narcissists would be less committed than nonnarcissists when communal activation is low but that this discrepancy would diminish or even disappear when communal activation is high.

Method

Participants. Seventy-eight married couples, who were recruited either through newspaper advertisements or through notices posted around campus and in the surrounding community, participated in Time 1 research activities of a longitudinal study of marital processes.³ Four months later, 68 of the couples participated at Time 2. Dropouts were no more or less narcissistic than participants who stayed involved at Time 2, $\beta = .04$, $t(76) = 0.43$, $p = .666$. At Time 1, participants were 34.74 years old, on average, and had been married for an average of 72.02 months. Most had no children (74%), and most were Caucasian (80%). Participants were well educated (82% had at least 4 years of college education), and their median personal annual income was \$20,001-\$30,000. Couples were paid \$50 for taking part in each research session.

Procedure. Ten days before the Time 1 laboratory session, we mailed participants questionnaires including instruments that assessed all key variables. As in Study 1, we assessed *narcissism* with the 40-item NPI ($\alpha = .85$). We assessed *communal activation* with a new measure developed for the purpose of the present research and derived from the extant literature regarding agency and communion (e.g., Bakan, 1966). This measure asked participants to indicate the degree to which the spouse

TABLE 1: Study 2: Means, Standard Deviations, and Bivariate Associations Among Key Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Narcissism	13.03	6.78	—	.12	.03	.12	.19*	.16 [†]
2. Communal activation	6.72	1.66	.13	—	.45***	.28***	.30**	.28**
3. Communal partner	7.29	1.40	.05	.43***	—	.20*	.21*	.25**
4. Agentic activation	6.19	1.60	.12	.28***	.21*	—	.13	.15
5. Time 1 commitment	6.82	1.17	.16*	.17*	.14 [†]	.07	—	.66***
6. Time 2 commitment	6.89	1.10	.09	.13*	.09	.07	.82***	—

NOTE: The bivariate associations are from multilevel modeling analyses where both variables were grand mean centered and intercept terms were allowed to vary randomly. For all associations, the column variable was modeled as the predictor and the row variable was modeled as the outcome. For example, the association between narcissism and communal activation was .13 when narcissism was modeled as the predictor and .12 when communal activation was modeled as the predictor.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

“elicits” or “draws out” specific characteristics from them. Our composite measure of communal activation assessed perceptions of the degree to which the partner elicits five traits from the individual: nurturing, generous, friendly, charitable, and warm ($\alpha = .73$). Each item was assessed on a scale ranging from 0 (*not at all*) to 10 (*absolutely*). We assessed *communal partner traits* by measuring perceptions of the degree to which the partner actually possesses the same five traits ($\alpha = .68$). We also assessed *agentic activation*, measuring perceptions of the degree to which the partner elicits six traits from the individual: ambitious, sophisticated, assertive, confident, independent, and sexy ($\alpha = .64$). We measured *commitment* using a previously validated, seven-item measure (Rusbult, Martz, & Agnew, 1998), modified as suitable for use in a marital rather than a dating context (e.g., “I want our marriage to last forever”; Time 1 $\alpha = .82$, Time 2 $\alpha = .82$). Items were assessed on a scale ranging from 0 (*do not agree at all*) to 8 (*agree completely*). Table 1 reports means, standard deviations, and bivariate associations for all key study variables.

Results

Analysis strategy. The data provided by the two partners in a given relationship are not independent. To account for this nonindependence, in Studies 2 and 3 we report results from multilevel modeling analyses (Raudenbush & Bryk, 2002). We modeled a two-level data structure, in which partner (Level 1) was nested within couple (Level 2), allowing intercept terms to vary randomly across couples (see Kenny, Kashy, & Cook, 2006).

Primary hypothesis tests. To test our hypotheses, we conducted a multilevel regression analysis predicting Time 2 commitment from Time 1 measures of communal activation, narcissism, and commitment, as well as the Communal Activation \times Narcissism interaction effect (see Figure 2); all variables were standardized ($M = 0$,

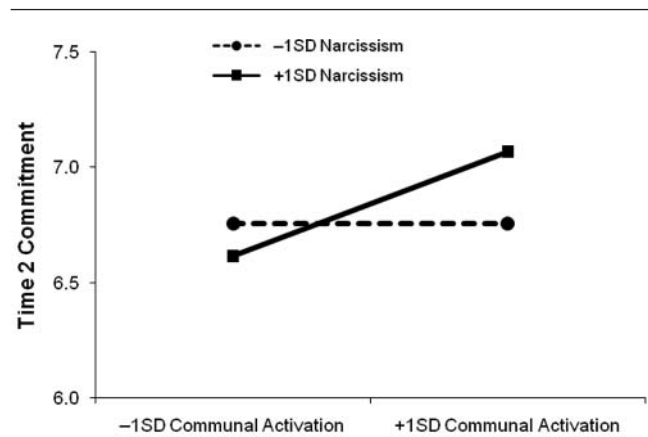


Figure 2 Study 2: Predicting Time 2 commitment from communal activation and narcissism, controlling for Time 1 commitment.

NOTE: Low and high values for each predictor variable are conditioned at 1 SD below and above the mean.

$SD = 1$). Not surprisingly, Time 1 commitment was significantly and powerfully associated with Time 2 commitment, $\beta = .78$, $t(62) = 11.62$, $p < .001$. Despite the strength of this stability effect, results revealed support for the communal activation hypothesis, with greater communal activation predicting stronger commitment, $\beta = .10$, $t(62) = 2.09$, $p = .041$. In addition—and consistent with the Communal Activation \times Narcissism hypothesis—the Communal Activation \times Narcissism interaction effect was significant, $\beta = .10$, $t(62) = 2.57$, $p = .013$. Tests of simple effects revealed that the association of communal activation with Time 2 commitment was significant and positive among narcissists (+1 SD), $\beta = .21$, $t(62) = 3.14$, $p = .003$, but not among nonnarcissists (–1 SD), $\beta = .00$, $t(62) = 0.00$, $p = 1.00$. The main effect of narcissism was nonsignificant, $\beta = .04$, $t(62) = 0.81$, $p = .421$.

As in Study 1, we conducted simple effects tests to establish whether the association of narcissism with Time

2 commitment was significant at low (-1 SD) and high ($+1$ SD) levels of communal activation. Contrary to predictions, narcissism was not significantly associated with Time 2 commitment at low levels of communal activation, $\beta = -.06$, $t(62) = -1.06$, $p = .294$, although the effect was descriptively in the predicted direction (with narcissists exhibiting lower commitment than nonnarcissists). In contrast, narcissism was significantly positively associated with Time 2 commitment at high levels of communal activation, $\beta = .14$, $t(62) = 2.17$, $p = .034$.

Controlling for communal partner traits and agentic activation. We conducted an additional multilevel multiple regression analysis to establish that the communal activation main effect and the Communal Activation \times Narcissism interaction effect remained robust beyond the effects of communal partner traits and agentic activation. This model predicted Time 2 commitment level from (a) the main effects of Time 1 communal activation, narcissism, communal partner traits, and agentic activation (all grand mean standardized); (b) all two-factor interactions involving these four main effects; and (c) the main effect of Time 1 commitment. No interaction effects involving either of the potential confounds approached significance, $|\beta| < .10$, $|t(55)| < 1.37$, $ps > .177$, and both the communal activation main effect, $\beta = .10$, $t(55) = 1.62$, $p = .112$, and the Communal Activation \times Narcissism interaction effect, $\beta = .10$, $t(55) = 1.83$, $p = .072$, still trended in the expected direction (albeit less definitively than in the primary analysis, which included 4 predictor terms rather than the 11 included in this confound analysis).

Participant sex. We conducted an additional multilevel regression analysis to explore whether our key effects differed for men and women. This model predicted Time 2 commitment from (a) the main effects of Time 1 communal activation, narcissism, and participant sex (all grand mean standardized); (b) all higher level interaction effects involving these three main effects; and (c) the main effect of Time 1 commitment. The Communal Activation \times Participant Sex interaction effect was marginally significant (with the positive association of communal activation with commitment somewhat stronger for men than for women), $\beta = -.08$, $t(58) = -1.80$, $p = .077$; the other two interaction effects involving participant sex did not approach significance, $|\beta| < .05$, $|t(58)| < 1.11$, $ps > .274$.

Discussion

Extending the experimental results of Study 1, the longitudinal results of Study 2 revealed support for the communal activation hypothesis and the Communal

Activation \times Narcissism hypothesis. Participants whose spouse elicited communal traits from them became more committed to their marriage over time, an effect that was particularly pronounced among narcissists. Furthermore, these effects were robust beyond any variance attributable to having a spouse who possessed communal traits or to having a spouse who elicited agentic rather than communal traits. At low levels of communal activation (-1 SD), narcissists were descriptively less committed to their marriage than were nonnarcissists (although this simple effect was not significant in the present sample); however, this trend disappeared and eventually even reversed at high levels of communal activation.

One surprising aspect of the Study 2 findings was that communal activation was not significantly associated with commitment among nonnarcissists. This pattern was also evident in Study 1—a finding that we speculated might be attributable to a ceiling effect for commitment level. Replicating this null effect in Study 2—a sample that did not suffer from a ceiling effect—suggests the intriguing possibility that communal activation might be irrelevant to commitment among nonnarcissists. Perhaps nonnarcissists' feelings of commitment are tethered to aspects of their relationship that are unrelated to the experience of communal activation. Before drawing firm conclusions, we await the results of Study 3 and the meta-analytic results across the three studies.

STUDY 3

In Study 3, we tested our hypotheses in a sample of committed partners, employing a laboratory procedure that afforded greater experimenter control over the processes at play than afforded by the longitudinal procedures in Study 2. In Study 3, we examined whether experiencing communal activation during discrete interactions with a romantic partner predicts enhanced relationship commitment, particularly among narcissists. Romantically involved couples engaged in two 6-min interactions—one regarding each person's most important personal goals. Immediately following their interactions, participants independently viewed the video of the conversations and rated the degree to which they experienced communal activation and relationship commitment during each conversation. Six months earlier, we had obtained narcissism and global commitment measures from each partner. We hypothesized that participants who experienced greater communal activation during the interaction would experience stronger commitment during the interaction, controlling for the effects of global commitment (communal activation hypothesis). We also predicted that the association of communal activation with commitment would be stronger among

narcissists than among nonnarcissists (Communal Activation \times Narcissism hypothesis).

Study 3 employed a new operational definition of communal activation. In Study 1, we activated cognitive representations of helping and nurturance. In Study 2, participants reported on the degree to which the partner elicited communal qualities from them. In Study 3, we operationally defined communal activation in terms of the degree to which participants felt loved and cared for during important, self-relevant interactions. If the Study 3 results provide support for the communal activation hypothesis and Communal Activation \times Narcissism hypothesis using this new operational definition, it will bolster our claim that communal activation is a broad construct encompassing a constellation of mental representations associated with such qualities as helpfulness, nurturance, generosity, friendliness, charitableness, warmth, love, and caring.

Method

Participants. One hundred and fifteen couples, who were recruited either through newspaper advertisements or through notices posted around campus and in the surrounding community, participated in Time 4 research activities⁴ of a longitudinal study of relationship dynamics and goal achievement. Six months later, 90 of these couples participated in Time 5 research activities. Dropouts from Time 4 to Time 5 were no more or less narcissistic than participants who stayed involved at Time 5, $\beta = .07$, $t(103) = 1.00$, $p = .318$. At Time 1 (2 years before Time 5), couples were newly committed—they had begun living with one another, become engaged, or married each other within the previous year or planned to do so during the coming year. At Time 5, participants were 28.22 years old, on average, and most were Caucasian (86%). They had been romantically involved for an average of 66.48 months, and most were married (81%), lived together (97%), and had no children (90%). Their median personal annual income was \$35,000, and more than one third (38%) were students (86% graduate and 14% undergraduate). Couples were paid \$110 for their participation in Time 5 research activities.

Procedure. At Time 4 (6 months before Time 5), participants completed measures of *narcissism* (the 40-item NPI; $\alpha = .86$) and *global commitment* (the 7-item measure adapted from Rusbult et al., 1998; $\alpha = .90$). Before the Time 5 laboratory session, participants completed a new measure of *communal partner traits*, which we created for the present research. It consisted of 4 items describing the degree to which the partner generally possesses communal tendencies (0 = *do not agree at all*, 8 = *agree completely*): “Helpful, unselfish

with others”; “Loyal, reliable”; “Sympathetic, warm”; and “Considerate, kind to almost everyone” ($\alpha = .78$). During Time 5 laboratory session, partners participated in two videotaped interactions and engaged in other activities that are unrelated to the purposes of the present research.

Interactions. Each Time 5 interaction concerned one partner’s most important ideal self goals. We selected interaction topics from participants’ descriptions of their top six ideal self goals, identifying a goal that was important to the participant, that had not yet been achieved, that was likely to be achieved during the next 5 to 10 years, and that the participant was willing to discuss. Partners discussed a broad range of goals, such as becoming more financially secure, getting into better physical shape, and finding a fulfilling career. Following a 2-min warm-up interaction during which partners discussed the events of the previous day, the experimenter explained that the research team had randomly determined which person’s topic would be addressed first and then read that person’s ideal description aloud. Partners then engaged in a 6-min discussion of each partner’s goals (e.g., how the goal might be achieved, whether there were obstacles to achieving it, what the implications of this goal were for other parts of their lives).

Following the two interactions, partners were seated in separate rooms, each facing a television monitor on which their video-recorded conversations were replayed. After watching each conversation, participants rated their own and the partner’s feelings, thoughts, and behaviors during the conversation (0 = *do not agree at all*, 8 = *agree completely*). We assessed *communal activation* with a one-item measure: “My partner made me feel loved and cared about.” We assessed *agentic activation* with a two-item measure ($\alpha = .94$): “My partner made me feel very capable and effective” and “My partner made me feel like a competent person.” Finally, we assessed *interaction-based commitment* with a one-item measure: “During this conversation, I felt very committed to our relationship.” As in Study 2, we performed multilevel modeling analyses to account for the non-independence of partners’ data. Table 2 reports means, standard deviations, and bivariate associations for all key study variables.

Results

Primary hypothesis tests. To test our hypotheses, we conducted a multilevel regression analysis predicting interaction-based commitment from communal activation, narcissism, and global commitment, as well as the Communal Activation \times Narcissism interaction effect (see Figure 3); all variables were standardized ($M = 0$,

TABLE 2: Study 3: Means, Standard Deviations, and Bivariate Associations Among Key Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Narcissism	15.02	6.99	—	.08	.11	.12	-.07	-.03
2. Communal activation	6.99	1.32	.11	—	.44***	.72***	.26***	.65***
3. Communal partner	6.36	1.19	.18*	.50***	—	.49***	.17*	.40*
4. Agentic activation	6.78	1.44	.13†	.73***	.43***	—	.20*	.51***
5. Global commitment	6.90	0.85	-.10	.29***	.15†	.24**	—	.43***
6. Interaction-based commitment	6.99	1.32	-.05	.65***	.34***	.51***	.40***	—

NOTE: The bivariate associations are from multilevel modeling analyses where both variables were grand mean centered and intercept terms were allowed to vary randomly. For all associations, the column variable was modeled as the predictor and the row variable was modeled as the outcome.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

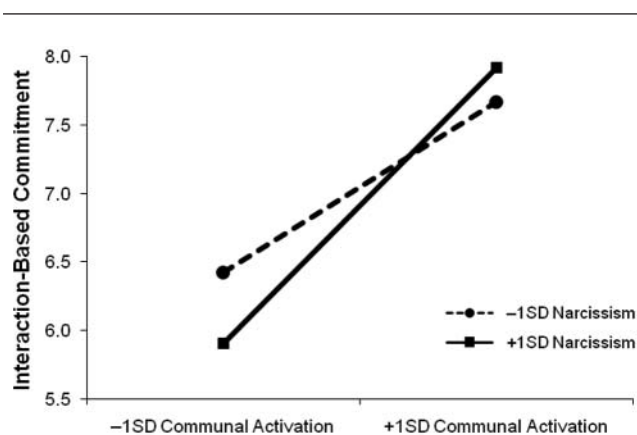


Figure 3 Study 3: Predicting interaction-based commitment from communal activation and narcissism, controlling for global commitment.

NOTE: Low and high values for each predictor variable are conditioned at 1 *SD* below and above the mean.

$SD = 1$). Not surprisingly, global commitment was significantly associated with interaction-based commitment, $\beta = .28$, $t(68) = 4.78$, $p < .001$. Despite this stability effect, results revealed support for the communal activation hypothesis, with greater communal activation predicting stronger commitment, $\beta = .62$, $t(68) = 10.49$, $p < .001$. In addition—and consistent with the Communal Activation \times Narcissism hypothesis—the Communal Activation \times Narcissism interaction was significant, $\beta = .14$, $t(68) = 2.62$, $p = .011$. Tests of simple effects revealed that the association of communal activation with interaction-based commitment was significant and positive among both narcissists (+1 *SD*), $\beta = .76$, $t(68) = 8.76$, $p < .001$, and nonnarcissists (-1 *SD*), $\beta = .47$, $t(68) = 6.41$, $p < .001$, although this link was stronger among narcissists. The main effect of narcissism was not significant, $\beta = -.05$, $t(68) = -0.92$, $p = .362$.

As in Studies 1 and 2, we also conducted simple effects tests to establish whether the association of narcissism

with interaction-based commitment was significant at low (-1 *SD*) and high (+1 *SD*) levels of communal activation. Consistent with predictions, narcissism was negatively associated with interaction-based commitment when communal activation was low, $\beta = -.20$, $t(68) = -2.61$, $p = .011$, but was not significantly associated with interaction-based commitment when communal activation was high, $\beta = .09$, $t(68) = 1.16$, $p = .251$. That is, when communal activation was low, narcissists were less committed than nonnarcissists; this difference was nonsignificant when communal activation was high.

Controlling for communal partner traits and agentic activation. We conducted an additional multilevel multiple regression analysis to establish that the communal activation main effect and the Communal Activation \times Narcissism interaction effect remained robust beyond the effects of communal partner traits and agentic activation. This model predicted interaction-based commitment from (a) the main effects of communal activation, narcissism, communal partner traits, and agentic activation (all grand mean standardized); (b) all two-factor interactions involving these four main effects; and (c) the main effect of global commitment. The Communal Activation \times Communal Partner interaction effect was marginally significant (with the positive association of communal activation with commitment somewhat stronger for individuals who view their partner as less, relative to more, communal), $\beta = -.20$, $t(61) = -1.86$, $p = .068$; all other interaction effects involving the potential confounds did not approach significance, $|\beta| < .07$, $|t(61)| < 1.06$, $ps > .297$. Furthermore, both the communal activation main effect, $\beta = .50$, $t(61) = 4.86$, $p < .001$, and the Communal Activation \times Narcissism interaction effect, $\beta = .19$, $t(61) = 2.28$, $p = .026$, remained significant in this confound analysis.

Participant sex. We conducted an additional multilevel regression analysis to explore whether our key effects

differed for men and women. This model predicted interaction-based commitment from (a) the main effects of communal activation, narcissism, and participant sex (all grand mean standardized); (b) all higher level interaction effects involving these three main effects; and (c) the main effect of global commitment. As in Studies 1 and 2, the communal activation main effect was not significantly moderated by participant sex, $\beta = -.02$, $t(64) = -0.42$, $p = .679$. However, in contrast to Studies 1 and 2, the Communal Activation \times Narcissism interaction effect was significantly moderated by participant sex, $\beta = .17$, $t(64) = 3.03$, $p = .004$.

Simple effects tests revealed that the pattern of results depicted in Figure 3 was stronger among men than among women. Tests performed for men supported both the communal activation hypothesis, $\beta = .57$, $t(73) = 7.43$, $p < .001$, and the Communal Activation \times Narcissism hypothesis, $\beta = .32$, $t(73) = 4.53$, $p < .001$. Tests performed for women also supported the communal activation hypothesis, $\beta = .54$, $t(73) = 6.19$, $p < .001$, but findings for the Communal Activation \times Narcissism hypothesis did not approach significance, $\beta = -.01$, $t(73) = -0.10$, $p = .923$.

Discussion

Replicating and extending the results of Studies 1 and 2, the results of Study 3 revealed support for the communal activation hypothesis and the Communal Activation \times Narcissism hypothesis (with support for the latter hypothesis emerging only among men). Participants whose partner made them feel loved and cared for during important, personally relevant interactions experienced greater relationship commitment during the interaction—an effect that was particularly pronounced among narcissists. Furthermore, these effects were robust beyond any variance attributable to having a spouse who possessed communal traits or to having a spouse who elicited agentic traits. At low levels of communal activation, narcissists experienced significantly less commitment than did nonnarcissists; however, this difference nonsignificantly reversed at high levels of communal activation.

The Study 3 results also address the lack of a significant association between communal activation and commitment among nonnarcissists in Studies 1 and 2. In Study 3, communal activation predicted greater commitment among both narcissists and nonnarcissists (although, as predicted, the effect was stronger among narcissists). Thus, across the three studies, evidence consistently revealed that communal activation is associated with enhanced commitment among narcissists, whereas evidence for an association of communal activation with commitment among nonnarcissists was inconsistent. We

provide a formal overview of the pattern of results across studies (including these simple effects of communal activation among narcissists and nonnarcissists) in the meta-analytic review.

The Study 3 analyses also revealed a sex difference. Although support for the communal activation hypothesis did not differ for men and women, support for the Communal Activation \times Narcissism hypothesis was stronger among men than among women (indeed, this interaction effect was nonsignificant among women). That this sex difference was observed only in Study 3 suggests that it may well be spurious. On the other hand, that it emerged at all serves as a call for further research regarding the associations among communal activation, narcissism, commitment, and sex.

META-ANALYTIC SUMMARY

To establish the overall pattern of results across the three studies, we conducted six meta-analyses. The first two tested whether the communal activation main effect (communal activation hypothesis) and the Communal Activation \times Narcissism interaction effect (Communal Activation \times Narcissism hypothesis) were significant. The remaining four examined the simple effects of communal activation among narcissists (+1 *SD*) and among nonnarcissists (−1 *SD*) and the simple effects of narcissism at low (control condition in Study 1; −1 *SD* in Studies 2 and 3) and high (communal activation condition in Study 1; +1 *SD* in Studies 2 and 3) levels of communal activation. We standardized all predictor and outcome variables in all analyses. To calculate each meta-analytic β , we weighted the β for each effect from each study (e.g., the Communal Activation \times Narcissism interaction effect in Study 1) by the inverse of its variance. To calculate each meta-analytic standard error, we took the square root of the reciprocal of the sum of the weights. To conduct hypothesis tests on our six meta-analytic effects, we divided the meta-analytic β by the meta-analytic standard error, which yielded a z statistic.

As depicted in Figure 4, these six meta-analyses revealed strong support for our hypotheses. Both the communal activation main effect, $\beta = .29$, $z = 8.22$, $p < .001$, and the Communal Activation \times Narcissism interaction effect, $\beta = .13$, $z = 4.05$, $p < .001$, were significant. Tests of simple effects revealed that the association of communal activation with commitment was significant both among narcissists, $\beta = .40$, $z = 8.06$, $p < .001$, and among nonnarcissists, $\beta = .17$, $z = 3.72$, $p < .001$, although the aforementioned interaction effect demonstrates that this association was significantly stronger among the former. Finally, tests of simple effects revealed that the association of narcissism with commitment was

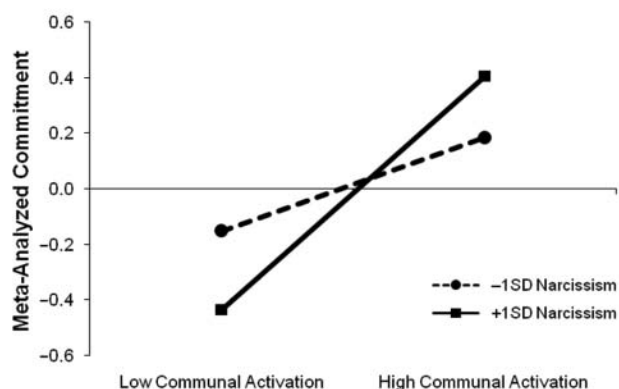


Figure 4 Meta-analytic results predicting commitment from communal activation and narcissism across Studies 1–3.

NOTE: Low and high values for narcissism are conditioned at 1 *SD* below and above the mean. Low levels of communal activation are conditioned at the control condition in Study 1 and at 1 *SD* below the mean in Studies 2 and 3; high levels of communal activation are conditioned at the communal prime condition in Study 1 and at 1 *SD* above the mean in Studies 2 and 3.

significant and negative at low levels of communal activation, $\beta = -.13$, $z = -2.94$, $p = .003$, but it was significant and positive at high levels, $\beta = .12$, $z = 2.45$, $p = .014$.

GENERAL DISCUSSION

These meta-analytic results demonstrate (a) that communal activation predicted elevated relationship commitment across the three studies and (b) that this effect was significantly stronger among narcissists than among nonnarcissists. When communal activation was low, narcissists were significantly less committed to their relationships than were nonnarcissists (see also Campbell & Foster, 2002; Foster, 2008), but this effect diminished and even reversed when communal activation was high.

These results emerged across diverse operational definitions of communal activation. As with the proverbial blind man and the elephant, our methods and procedures differed across the three studies, yet they collectively revealed the nature of the beast. As with communion more generally, communal activation is a broad construct, and the varying procedures we employed demonstrate its breadth. Various processes activate communal representations, all of which predict increased commitment among narcissists.

Implications

One implication of this work concerns the relative importance of the activation of communal versus agentic mental representations in narcissists' relationships.

Communal activation reliably accounted for unique variance beyond agentic activation in predicting relationship commitment among narcissists, but agentic activation reliably did not account for unique variance beyond communal activation (see Studies 2 and 3). Consistent with the line of reasoning underlying our hypotheses, these results suggest that deactivating agentic representations is a far less effective means of promoting narcissists' commitment than is activating communal representations.

Identifying communal activation as a key predictor of commitment among narcissists also has exciting practical implications: Narcissists can become more dedicated to their relationships, and communal activation is particularly promising mechanism through which they can do so. For example, we found that communal activation by a spouse predicts increases over time in marital commitment among narcissists (see Study 2). Perhaps scholars and clinicians can develop therapeutic interventions to facilitate the communal activation process in relationships involving narcissistic individuals. Although the efficacy of such hypothetical interventions remains to be demonstrated, the potential for such an intervention to promote healthy relationships and reduce individual suffering may be considerable.

These exciting practical implications notwithstanding, there is perhaps cause for cautious optimism rather than exuberance. First, we have not demonstrated how best to activate communal concerns over the course of long-term involvement; for example, it is a long way from a subliminal prime (see Study 1) to a therapeutic intervention. Second, there remains cause for skepticism about the benefits of involvement with a narcissist. Aside from their frequent lack of commitment, narcissists can be trying in myriad other ways (Campbell, 2005). It remains to be determined whether commitment is the motivational key to healthy involvement among narcissists (as it is, on average, among romantic partners)—whether highly committed narcissists in fact eschew the destructive tendencies that are characteristic of less committed narcissists (e.g., the perception that romantic alternatives are desirable, the tendency to be unfaithful, the tendency to play games with romantic partners) to become generally compassionate, supportive partners.

Limitations and Strengths

Before closing, we acknowledge two limitations of the present research. First, despite the broad consistency of the findings across studies, there were four imperfections in the pattern of results. First, in Study 1, nonnarcissists appeared to exhibit a ceiling effect on the commitment measure. Second, in Studies 1 and 2, the

simple association of communal activation with commitment was not significant among nonnarcissists. Third, in Study 2, the negative simple association of narcissism with commitment did not reach statistical significance at -1 SD on communal activation. And fourth, in Study 3, the Communal Activation \times Narcissism interaction effect was moderated by participant sex. Despite these imperfections, however, the pattern of results across the three methodologically diverse studies provides strong overall support for our conceptual analysis (see Figures 1–3). In particular, in all three studies, both the Communal Activation \times Narcissism interaction effect and the simple association of communal activation with commitment among narcissists were significant. These were our key predictions from the outset, and they received strong empirical support. Furthermore, the meta-analytic results provide unambiguous, big-picture support for all aspects of our hypotheses (see Figure 4).

Second, our results may not apply to clinical narcissists. Clinical measures of narcissism (e.g., the Personality Diagnostic Questionnaire) may assess somewhat different underlying constructs than those assessed by the NPI (for a discussion of this issue, see Miller & Campbell, 2008; Miller, Gaughan, Pryor, Kamen, & Campbell, 2009). Our findings are especially relevant to the large and growing social-personality psychology literature that employs the NPI, but their relevance beyond this literature is unknown. Improving the relationship behavior of nonclinical narcissists is certainly a valuable goal in its own right, but activating communal representations among individuals with narcissistic personality disorder may well be qualitatively more difficult.

We also highlight two strengths of the present research. First, as mentioned earlier, our attempt to foster narcissists' relationship commitment could have considerable practical value. Overwhelming empirical evidence suggests that narcissists are poor relationship partners (Campbell, 2005), and we are aware of no previous research identifying a predictor of bolstered relational orientation among narcissists. The present work might serve as a first step toward developing interventions that can make narcissists better relationship partners—a possibility that seems all the more feasible in light of the experimental effects we observed among narcissists in Study 1 and the longitudinal effects we observed among narcissists in Study 2.

Second, we employed diverse and ambitious empirical procedures to test our hypotheses. Experimental (Study 1), longitudinal (Study 2), and interaction-based (Study 3) procedures converged on the conclusion that communal activation predicts increased commitment among narcissists—and does so significantly more

strongly than it does among nonnarcissists. These effects were robust in samples ranging from college students to married couples.

Conclusions

Three studies demonstrated that the activation of communal mental representations predicts increased commitment, particularly among narcissists. This research suggests an important mechanism for improving narcissists' relational behavior and could well serve as the basis for therapeutic interventions designed to help narcissists overcome their communal deficits and become more committed relationship partners.

In Greek mythology, Narcissus's metamorphosis involved his death and rebirth as a flower. The present research investigated a less lethal and less metaphysical metamorphosis involving narcissists' death as uncommitted relationship partners (at low levels of communal activation) and rebirth as committed relationship partners (at high levels). Whether this metamorphosis in turn causes narcissists behave like beautiful flowers, eagerly doing whatever it takes to make their relationship flourish, is an important question for future research.

NOTES

1. Our discussion focuses on narcissism as an individual difference variable that is continuously and normally distributed across individuals. We do not examine narcissistic personality disorder, which shares many characteristics with trait-based narcissism but is not identical to it (Miller & Campbell, 2008). We use the terms *narcissists* and *non-narcissists* to describe individuals with high and low scores, respectively, on the continuum of trait narcissism.

2. The only effect that approached significance was for the word *flirt*, $\beta = -.28$, $t(72) = -2.51$, $p = .014$, an effect that trended in the opposite direction from the commitment effect from our primary analysis. Relative to nonnarcissists, narcissists were less likely to self-identify as flirtatious in the communal activation condition than in the control condition.

3. The data for one additional couple, a lesbian couple, were omitted from all analyses because our data analytic procedures required that partners be distinguishable (see Kenny, Kashy, & Cook, 2006). In addition, the association of narcissism with commitment was examined previously using this sample of participants (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), although that study did not examine moderation of this association by communal activation.

4. Time 4 was the only wave of data collection at which narcissism was assessed.

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